

Operating Manual

(Translation of the original operating manual)

Keep for future reference!

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Scissor Lift

HW4003, HW4004, HW4010 und HW6014D



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Legal notice

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This operating manual contains descriptions and instructions to enable you to operate the scissor lift and to perform simple upkeep tasks.

It does not describe any complicated upkeep or repair work on the machine and components. For such activities, please contact Bernd Siegmund GmbH.

You have further questions or requirements? We will be happy to help.

Warranty

The legal warranty obligations and periods will apply.

All warranty claims will become void if the product is used in a manner not corresponding to its intended purpose, is subjected to unauthorised technical alterations or is opened (modification).

Bernd Siegmund GmbH will not be liable for any damage or accidents that are attributable to use in a manner not corresponding to the product's intended purpose, unauthorised modification of the product or non-observance of this operating manual.

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1 General information

IMPORTANT

Read carefully before use!

Keep for future reference!

This operating manual contains information on how to safely use the scissor lift (item number HW4003, HW4004, HW4010 and HW6014D), which is a machine used for raising and lowering welding tables on which components to be welded or otherwise processed are mounted.

The scissor lift is referred to below as a "lifting platform" or "machine".

Before commencing their activities, all people who are tasked by the owner with the operation, maintenance and repair of the machine must have read and understood the operating manual, in particular section "2 Safety". This especially applies to personnel who are only occasionally tasked with work on the machine, e.g. maintenance technicians and external personnel.

**WARNING****Observe the operating manual:**

- All people who operate the lifting platform must have read the operating manual beforehand.

The owner must ensure that at least one copy of the operating manual is available at the machine and accessible to the target people who handle the product.

The operating manual is part of the machine and must be kept throughout its service life.

The operating manual must be passed on to every subsequent owner or user of the machine.

The manufacturer will not be liable for personal injuries and property damage that are attributable to non-observance of the operating manual and in particular the safety instructions given in the operating manual.

1.1 Target group

The target group of this operating manual are all people who are tasked by the owner with activities (e.g. operation, setup, cleaning, maintenance, repair, etc.) on the lifting platform. This will also apply to external personnel.

Furthermore, observe the personnel requirements specified in section 2.2!

1.2 Copyright

This operating manual as well as the operating documents remain the intellectual property of Bernd Siegmund GmbH. They are supplied to the customer/owner as an integral part of the product.

Without our explicit consent, these documents may be neither duplicated nor made available to third-party companies, in particular competing companies.

2 Safety

2.1 Explanation of safety instructions and warning notices

This operating manual contains safety instructions and warning notices which are intended to prevent personal injury and property damage. It is essential to observe the warning notices. Failure to observe these notices can lead to personal injury, property damage, the destruction of components and the inoperability of the lifting platform.

Presentation of safety instructions and warning notices

Safety instructions and warning notices are clearly highlighted. They have the following structure:

	⚠ WARNING Type of danger Description, cause and source of the danger • Measure 1 to avert the danger ⇒ Optional: Submeasure
---	--

The following signal words are used:

⚠ DANGER	Warning of immediate severe injury or risk to life Indicates an immediately hazardous situation that will lead to death or severe injury if the safety measures are not observed.
⚠ WARNING	Warning of potential severe injury or risk to life Indicates a potentially hazardous situation that can lead to death or severe injury if the safety measures are not observed.
⚠ CAUTION	Warning of a danger Indicates a potentially hazardous situation that can lead to minor or slight injury if the safety measures are not observed.
NOTE	Warning of property damage Failure to observe this notice can result in damage to the machine or its surroundings.

Simplified safety instructions and warning notices

Safety instructions and warning notices may deviate from the form shown above if they are also understandable and actually more succinct in simplified form.

Simplified safety instructions and warning notices consist of

- Signal word with coloured background corresponding to the warning levels
- Information text

Example of a simplified warning notice; "Warning" danger level:

⚠ WARNING	• Text of the simplified safety instruction and warning notice.
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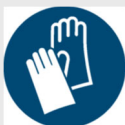
Warning symbols

The following symbols indicate hazards:

	General hazard		Risk of hand injuries
	Danger from suspended loads		Risk of falling

Personal protective equipment

The following symbols indicate that personal protective equipment must be worn:

	Use hand protection		Use foot protection
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2.2 Obligations of owner and personnel

2.2.1 Obligations of owner, organisational measures

The owner tasks in-house personnel or external personnel with the operation, maintenance, repair, etc. of the lifting platform.

Danger warnings

The owner must ensure that the safety instructions and warning notices for the product are observed and that the safety instructions and warning notices as well as the information signs are in a clearly legible condition.

Modifications

Without the consent of the manufacturer, it is not permitted to make any modifications (retrofits, additions) to the machine if such modifications may impair safety. This also applies to the installation of safety devices.

Checks, servicing

Legally required periods for recurring checks and servicing as specified in section "6 Servicing and maintenance" and in the operating manuals of the components must be observed.

Personnel selection, personnel qualification

Work on the machine may only be performed by reliable personnel authorised by the owner. Activities on the lifting platform require the knowledge of a trained and instructed person; additionally, an appropriate technical qualification is required for certain activities.

- The owner must establish the responsibilities of the operating personnel, also with regard to safety-compliant conduct and empower the operating personnel to refuse to carry out unsafe activities.
- Personnel who are in the training, instruction, learning or onboarding phase, as well as people under the age of 18 may only work on the lifting platform if they are under the constant supervision of an experienced person.

The owner must take organisational and instructive measures to ensure that the relevant safety standards and safety rules are observed by people who are tasked with operation, maintenance and repair of the machine.

Personal protective equipment

The owner is obliged to provide the personnel with the necessary personal protective equipment, such as protective gloves and safety footwear.

The owner must ensure that only personnel with the required protective equipment work on the lifting platform.

2.2.2 Obligations of personnel

All people who are tasked with working on the machine are obliged

- to conduct themselves in a safe and responsible manner at all times in order to ensure occupational health and safety;
- to follow and comply with national laws and regulations as well as the applicable in-plant regulations defined by the owner with respect to accident prevention, work safety and firefighting;
- to perform the following if the operating behaviour of the machine changes and if malfunctions occur which jeopardise the safety of people or endanger the machine:
 - to immediately shut down the machine;
 - to immediately report the faults to the relevant authority/person; and
 - to notify the affected personnel.

2.3 General safety instructions

The lifting platform may be used only if it is fully functional and in a technically flawless condition.

The lifting platform must undergo a visual inspection before each use to ensure that it is in perfect working order.

- Check for
 - damage;
 - corrosion; and
 - leak-tightness of the hydraulic system.

Also observe the following basic rules:

In the event of unusual operating behaviour, noises, etc., find the cause immediately.



WARNING



- Wear personal protective equipment on the machine: protective gloves, safety footwear



CAUTION

Risk of falling

People may fall from the lifting platform if they climb onto it.

- It is forbidden to stand or climb on the lifting platform.



WARNING

Crushing hazard

Components or the welding table may fall off the lifting platform if they are unstable and not fastened securely.

- Place the welding table in the middle and screw it in place (see section 4). Only use welding tables with mounting holes supplied by the manufacturer. Other welding tables must be approved by the manufacturer.
- Transport with a crane: Secure the welding table with a crane until it is screwed onto the lifting platform.
- Securely clamp all components to the welding table. Distribute the components uniformly on the welding table.
- The welding table and components mounted on it must not exceed the load capacity (see section 2.8).

WARNING

Crushing hazard

People can be crushed while placing the welding table in position. There is also a danger if the components tip over or fall off the welding table.

- The welding table should preferably be transported by crane.
 - ⇒ Attach the welding table securely to the transport equipment: Mount the transport brackets to the welding table; mount one transport bracket centrally and several transport brackets in such a way that the welding table remains stable and level during transport.
 - ⇒ Insert the slings into the transport brackets.
 - ⇒ Only use transport equipment, lifting gear and slings that are suitable for the load. Observe the weight specification of the welding table.
 - ⇒ Observe the applicable regulations regarding transport using a crane.
- Ensure safe transport of the welding table.
 - ⇒ Ensure that the welding table is not tilted when lifted.
 - ⇒ Move the load slowly and smoothly.
 - ⇒ Avoid unstable positioning of the load on the transport equipment; avoid rocking and swinging.
 - ⇒ Set down the load slowly.
- The welding table must only be transported by trained and authorised personnel.
- Only the people required for the work are allowed to be in the danger zone. Do not stand below suspended loads.



WARNING

Crushing hazard

People can be crushed when the lifting platform is raised or lowered: lifting mechanism, struts, strut guides in the base frame and support frame.

- Do not reach into the lifting mechanism or into the guide rails of the struts.
- Do not crawl into the area containing the lifting mechanism or under the lifting platform. Do not place your head inside the lifting mechanism.
- Ensure that there are no other people at the lifting platform while it is being raised or lowered.



2.4 Product description

Different welding tables on which components are secured for manual welding work or other processing operations (e.g. milling, sawing or grinding) are mounted on the lifting platform. These components can then be moved to the correct working height by raising or lowering the lifting platform.

2.5 Operator positions

Operator positions are

- on all sides of the welding table for
 - positioning and mounting the components to be welded and/or processed;
 - welding or other processing operations; and
 - placing and screwing the welding table in place.

2.6 Intended use

The lifting platform is used for mounting components for manual welding work or other operations (e.g. sawing, milling) and for adjusting their height.

By raising or lowering the lifting platform, the welding table (i.e. the work surface on which the components are mounted) can be moved to the correct height.

The welding tables can be replaced. Only welding tables approved by the manufacturer may be mounted on the lifting platform.

Only welding tables from Bernd Siegmund GmbH may be mounted. Welding tables from other manufacturers as well as welding tables that have features different to those specified above must also be approved beforehand by the manufacturer of the lifting platform.

Each welding table must be mounted centrally on the lifting platform (see Installation instructions from page 36). Only welding tables that can be mounted centrally are permissible.

Components may be transported, welded or otherwise processed on the lifting platform only if they are in a stable position and screwed or clamped securely to the welding table. Where possible, the weight of the components must be distributed centrally and uniformly on the welding table.

The combined weight of the welding table and components must not exceed the load capacity.

If used outdoors, the lifting platform must be protected from moisture and, if necessary, dried in order to prevent corrosion.

The machine and its components must not be modified without first consulting the manufacturer.

Intended use also includes:

- Use of the lifting platform only when it is in perfect working order;
- Compliance with the operating and ambient conditions specified by the manufacturer; and
- Compliance with the procedures described in this operating manual and observance of all safety instructions.



WARNING

- Only use the lifting platform and its components in accordance with their intended use, technical data (see section 2.8) and the operating manuals of the components.

The manufacturer will not accept liability for personal injuries and property damage resulting from inappropriate use of the lifting platform.

2.7 Foreseeable misuse

Misuse arises if

- the components mounted on the lifting platform have features different to those described in section 2.6; it is particularly important that the combined weight of the components and welding table does not exceed the load capacity;
- impermissible welding tables as defined in section 2.6 or welding tables not approved by the manufacturer are mounted on the lifting platform;
- the welding table is not or cannot be mounted centrally on the lifting platform;
- the components are not attached to the lifting platform in such a way that their weight is distributed uniformly on the welding table; or
- the lifting platform is not used in accordance with the technical data specified in section 2.8.



WARNING

- Do not use the lifting platform if it or its components are damaged.

All types of use not described in section "2.6 Intended use" are forbidden and are regarded as misuse.

2.8 Technical data

Item no.	HW4003	HW4004	HW4010	HW6014D
ERP no.	00005045	00005046	00005047	00005048
For welding table (item no.)	xx0020	xx0060	xx0030	xx0040
Platform length [mm]	1990	1990	2390	2990
Platform width [mm]	990	1190	1190	1490
Min. / max. height [mm] (excl. welding table)	300 / 1400			400 / 1050
Effective stroke [mm]	1100			650
Load capacity [kg]	4000			6000
Load type	Distributed load			
Lifting time when loaded [sec.]	45~55			35~45
Weight [kg] (approx. excl. welding table)	470	490	530	865
Power [kW]	2.2			
Operating voltage [V]	400			
Protection class	IP 54			
Insulation class	F			
Hydraulic fluid type	HL 32			

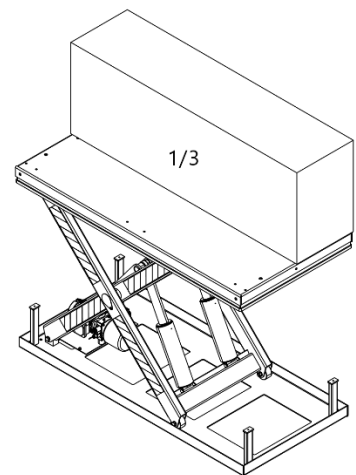
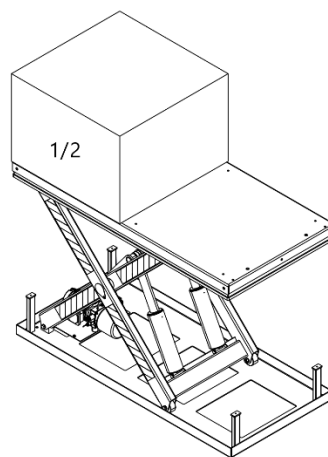
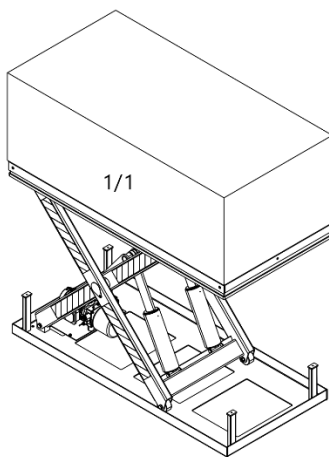
**NOTE**

The maximum load (load capacity) refers to a uniform distribution of the load over the entire platform surface.

2.9 Use of the platform surface

The following load situations apply:

- 100% of the nominal load distributed over the entire platform surface
- or
- 50% of the nominal load distributed over half the length of the platform
- or
- 33% of the nominal load distributed over half the width of the platform



3 Transport

3.1 Delivery

The lifting platform is delivered by the manufacturer or transport company with appropriately qualified personnel.

3.2 Transport safety

When replacing the welding table, transporting the lifting platform with other transport equipment or transporting individual components (e.g. for repair or replacement) or components to be processed, injuries may occur caused by the lifting platform, welding table or falling or tipping components. Therefore, observe the following safety instructions.

If necessary, the lifting platform can be transported using the ring bolts (Figure 1) and round slings supplied. The round slings or transport straps are not included

During this time, no welding table must be mounted on the lifting platform.

To do this, move the lifting platform to the lower end position and tighten the ring bolts through the four holes on the lower frame (Figure 2).

Observe the maximum load-bearing capacity of the lifting gear to be used.

Save the ring bolts for future use.

Only authorised and trained or suitably qualified people are allowed to transport the welding table, lifting platform or individual components. They are responsible for the correct and safe transport.

All people who are not required for the work must leave the danger zone.

Do not stand below suspended loads!

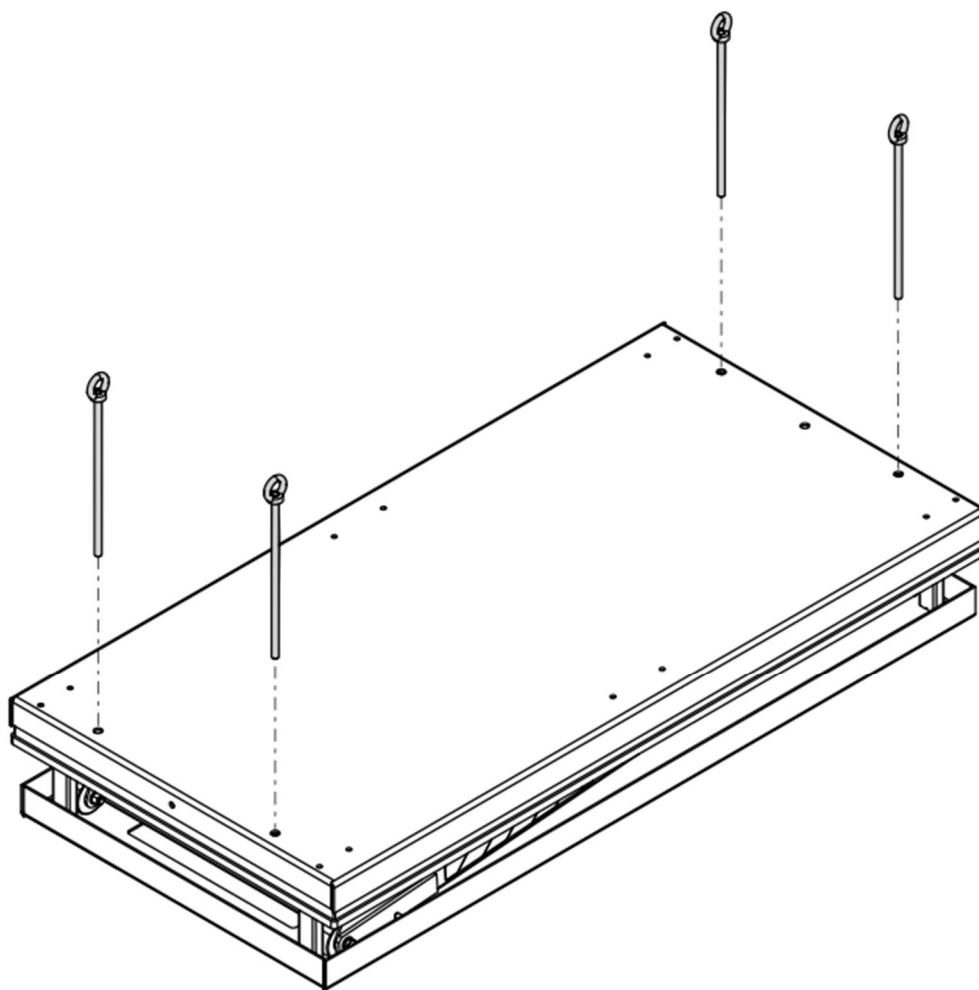


Figure 1: Ring bolts, supplied

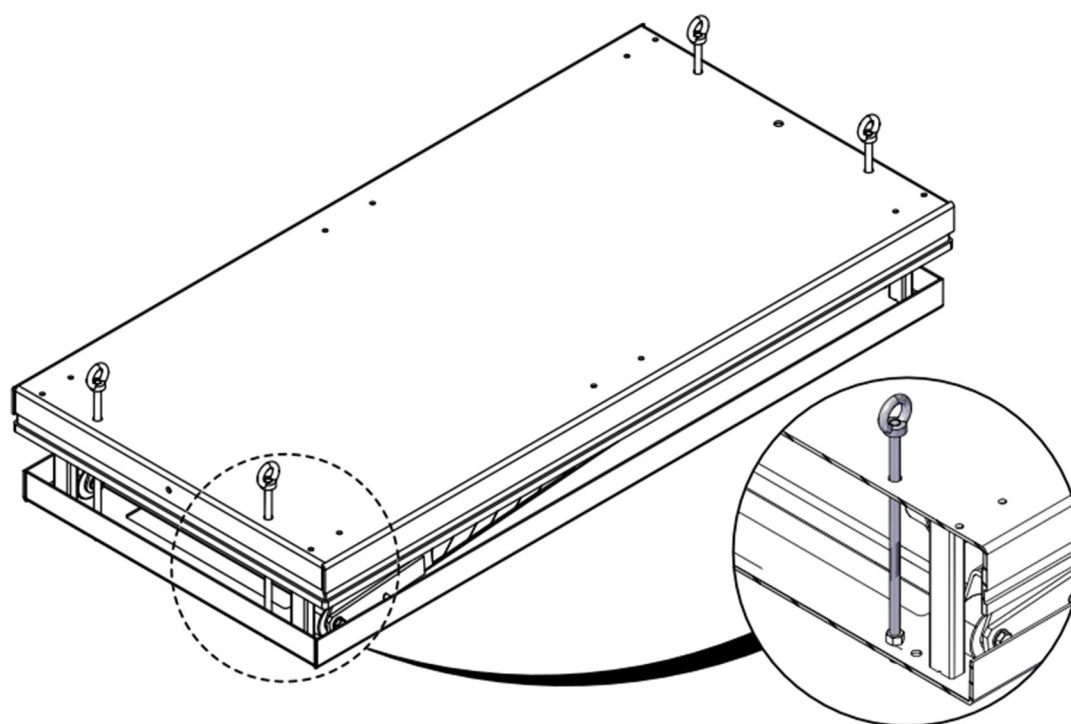


Figure 2: Ring bolts, screwed on

4 Mounting and removing the welding table

This section sets out an example of the welding table being mounted and removed.



WARNING

Crushing hazard

People can be crushed while placing the welding table in position on the lifting platform.

- Using the transport equipment (crane), position the welding table centrally over the lifting platform.
- Ensure that there is nobody in the danger area: Only the people required for the work are allowed to be at the lifting platform.
- Set down the welding table slowly, making sure that it is in a stable position.
- Slowly lower the welding table.
- If the welding table is located directly above the adapter plates to which it is attached (see the installation manual in the appendix), pull it into the exact position by hand if necessary.
- Lower the welding table onto the adapter plates.
Attach the screws to the adapter plates
- The welding table should remain secured by means of the transport equipment until it is securely mounted. Only then should the slings be removed.

4.1 To mount the welding table:

- Screw the adapter plates onto the welding table (see Installation instructions from page 36)
- Move the welding table to the lifting platform using suitable transport equipment (e.g. crane).
- Position the welding table centrally above the lifting platform. Only welding tables that can be mounted centrally on the lifting platform are permissible.
- Attach the adapter plates to the lifting platform with screws (see Installation instructions from page 36)

4.2 To remove a welding table:

- Remove all components from the welding table.
- Mount the transport brackets on the welding table. If one transport bracket is used, attach it centrally; if several transport brackets are used, attach them in such a way that the welding table remains stable and level during transport.
- Insert slings through the transport bracket(s).
- Raise the transport equipment until the lifting gear is slightly tensioned in order to secure the welding table to the transport equipment.
- Loosen all the screws securing the adapter plates to the lifting platform.
- Lift off the welding table.
- Unscrew the adapter plates from the welding table.

WARNING

- Avoid lifting off at an angle; the pulling force must be applied vertically upwards.
- Avoid swinging and rocking when lifting and transporting.

5 Operation

5.1 Safety

Observe the following safety instructions:

- Always position the lifting platform on a level surface.
- Provide sufficient space at the installation location.
- Visually inspect the lifting platform before each use to ensure that it is in perfect working order.
 - The lifting platform must not be damaged and must not exhibit any significant corrosion. It must be fully functional and in a technically flawless condition.
 - The welding table must be securely attached.

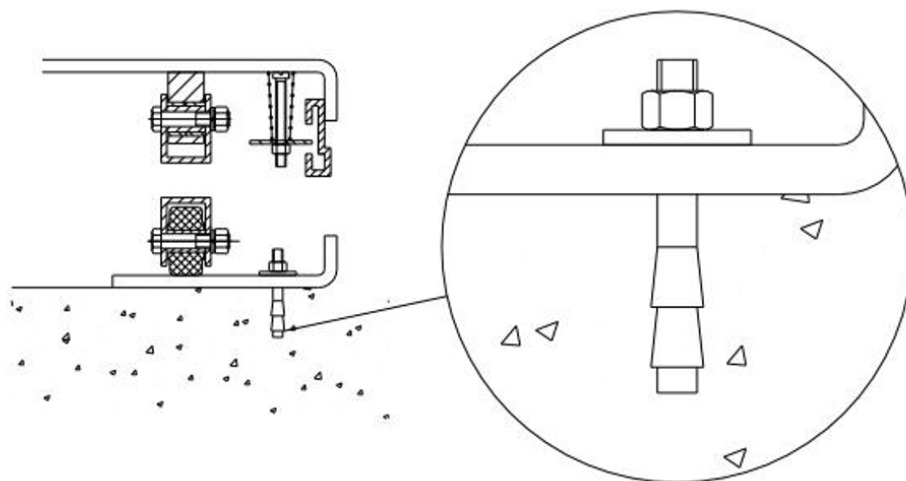
Only authorised and trained people are allowed to use the lifting platform. They are responsible for ensuring that the lifting platform is used correctly and safely.

5.2 Positioning the lifting platform on the floor or in a pit

Double or triple vertical lifting platforms must be fixed to the floor (e.g. by means of anchoring).

We also recommend that all other lifting platforms are securely mounted on the floor to prevent unintended movement.

Example of the lifting platform being fastened to a concrete floor by means of anchoring:

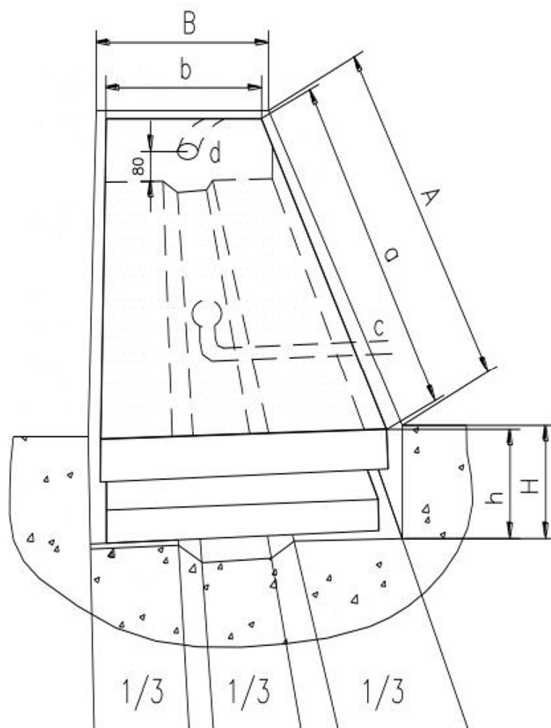


5.2.1 Mechanical/electrical installation

1. The base frame of the lifting platform is not self-supporting as standard.
It is important that the floor is level and stable and that the installation area or pit, if required, is well drained.
2. Insert a lifting sling through the scissor mechanism. Attach the base frame to the platform or scissor mechanism. Move the lifting platform to the desired position. Rotate the end of the fixed arm to the side where you want to move the load up or down the upper plane.
See the figure below.
3. Check the function of the safety frame on all sides.

The control unit should be positioned in such a way that the operator has a clear view of the lifting platform and the load at all times during operation of the lift.

5.3 Sketch of the pit for the lifting platform



- A. Pit length = $a + 30\text{mm}$
- B. Pit width = $b + 30\text{mm}$
- H. Pit depth = enclosed table height + 5mm
- a. Platform length
- b. Platform width
- c. Drainage opening (if required)
- d. Conduit for external cables and hoses $\varnothing 60\text{ mm}$
- h. Lowest height

5.4 Raising and lowering the lifting platform

The lifting platform has a pushbutton connected to the cable (manual control panel with a deadman control).

The EMERGENCY STOP button is also located on this manual control panel.

Raise or lower the lifting platform by pressing the appropriate button on the manual control panel (see Figure 3).

Short, jerky lifting and lowering is prohibited. This causes the lifting platform to vibrate, which can cause the machine to fail.



Figure 3: Manual control panel for raising and lowering the lifting platform

5.4.1 Raising the lifting platform

Screw on the emergency stop button and release it.

- Press the UP button and the unit starts working to lift the load.
- Release the UP button and the lifting platform will remain in position.

5.4.2 Lowering the lifting platform

- Press the DOWN button and the lifting platform will lower.
- Release the DOWN button and the lifting platform will remain in position.



NOTE

- The lifting platform is fitted with a contact strip to prevent accidents.
- If the contact strip hits an object while the table is being lowered, the operation will stop (EMERGENCY STOP). In such cases, check the lifting platform. After removing the obstruction, press the UP button lightly and the electrical system will operate as normal.

5.4.3 EMERGENCY STOP

There are two emergency stop methods:

- Press the emergency stop button on the manual control panel and the table will stop moving.
- Strike the contact strip upwards and the movement of the lifting platform will also stop.

5.5 Mounting components

Components are best mounted on the welding table when the welding table is already set to the appropriate working height. It is, however, possible to adjust the height later. Components may only be mounted by trained personnel provided by the owner or by trained people from an external company.

When the components come to rest on the welding table, they must be fixed in place using suitable clamping and fastening elements.

Components, clamping and fastening elements can be mounted securely using the system holes in the welding table. The clamping and fastening elements must be suitable for the components and their weight as well as for attachment to the welding table. You must be able to fix the components in a stable position that prevents them from tipping or slipping.

When mounting the components on the welding table, observe the following safety instructions:

- The safety instructions in sections 3 and 5.1 apply when transporting the components.
- The lifting platform must be on a level surface before mounting components
- While mounting the components, all temporarily deposited components must be secured to prevent them from tipping over, falling over and falling off.
- Ensure that there is nobody in the danger area: Only the people required for the work are allowed to be at the lifting platform.

6 Servicing and maintenance

Servicing and maintenance ensure that the lifting platform is always safe to use.

Work on the electrical and hydraulic equipment must only be carried out by specialists!

6.1 Daily inspection

The daily inspection is used to detect malfunctions or faults on the lifting platform.

Before operating the lifting platform, check the following points.

- Check for scratches, distortions or cracks on the lifting platform.
- Check the table for ease of movement.
- Check if hydraulic fluid is leaking.
- Check that all screws and nuts are tight.



WARNING

- Do not use the lifting platform if a malfunction or fault has been detected.

6.2 Regular inspection

In addition to the daily inspection, the following table shows the required measures and the corresponding time intervals.

Measure	After every 500 hours of operation or every 3 months	After every 2000 hours of operation or every 12 months
Check the oil level in the oil tank	X	
Check the cleanliness of the oil filter	X	
Reattach all the connecting parts	X	
Check the wear of the hydraulic fluid lines	X	
Check the hydraulic cylinder	X	
Retighten the main parts	X	
Check the function of the micro switches	X	
Check the overall operating status of the lifting platform	X	
Lubricate all joints and pivot points	X	
Check the wear of all axial bushings		X
Replace the hydraulic fluid for the first time	Cumulative working time of ten hours	
Change the hydraulic fluid		X
Check the oil loss		X

When determining the oil level, it is important to ensure that the tank contains the largest quantity when the Hubbühne is in the lowest position.

Be careful not to spill hydraulic fluid. Take precautions to collect spilled oil (e.g. with a collection tray).

Hydraulic fluid can cause rashes and other health problems.

Therefore, avoid prolonged skin contact. Wash yourself thoroughly after contact and wear protective clothing.

6.3 Lubrication

Regular lubrication is necessary to maintain the functionality of the lifting platform.

When lubricating the bearings, the lifting platform must not be loaded and the inspection supports must support the lifting platform to prevent unintended lowering (see section 6.4)

The lubrication points of the HW4003, HW4004 and HW4010 lifting platforms can be found in Figure 4.

The lubrication points of the HW6014D lifting platform can be found in Figure 5.

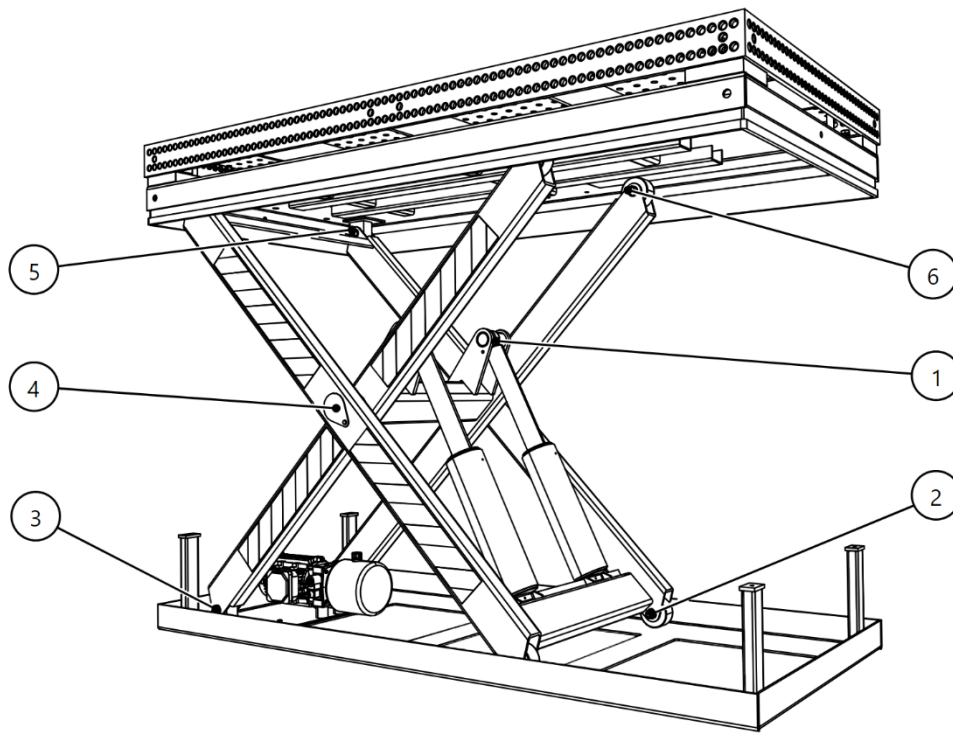


Figure 4: Lubrication points – HW4003, HW4004 and HW4010

1. Piston rod bearing (2x)
2. Lower roller (2x)
3. Lower arm mount (2x)
4. Centre of scissors (2x)
5. Upper scissor mount (2x)
6. Upper roller (2x)

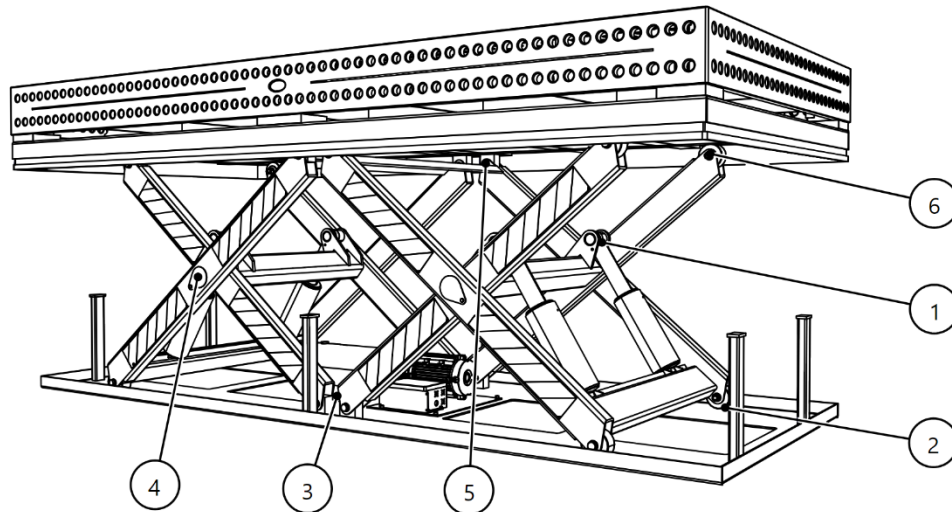


Figure 5: Lubrication points – HW6014D

1. Piston rod bearing (4x)
2. Lower roller (4x)
3. Lower arm mount (4x)
4. Centre of scissors (4x)
5. Upper scissor mount (4x)
6. Upper roller (4x)



WARNING

- Maintenance work on the lifting platform that is not performed promptly or is performed incorrectly may pose a risk to people after the lifting platform is put back into regular operation.
- Before the maintenance work, the inspection supports must be mounted (see section 6.4) to prevent the lifting platform from unintentional lowering. The inspection supports are located on or near the subframe.

6.4 Inspection supports

Maintenance and repair work within the raised lifting platform may only be carried out when it is unloaded. In addition, the lifting platform must be supported at the designated points by the inspection supports (2x HW40xx or 4x HW6014D).

The inspection supports are located on both sides near the lower rollers (see Figure 6).

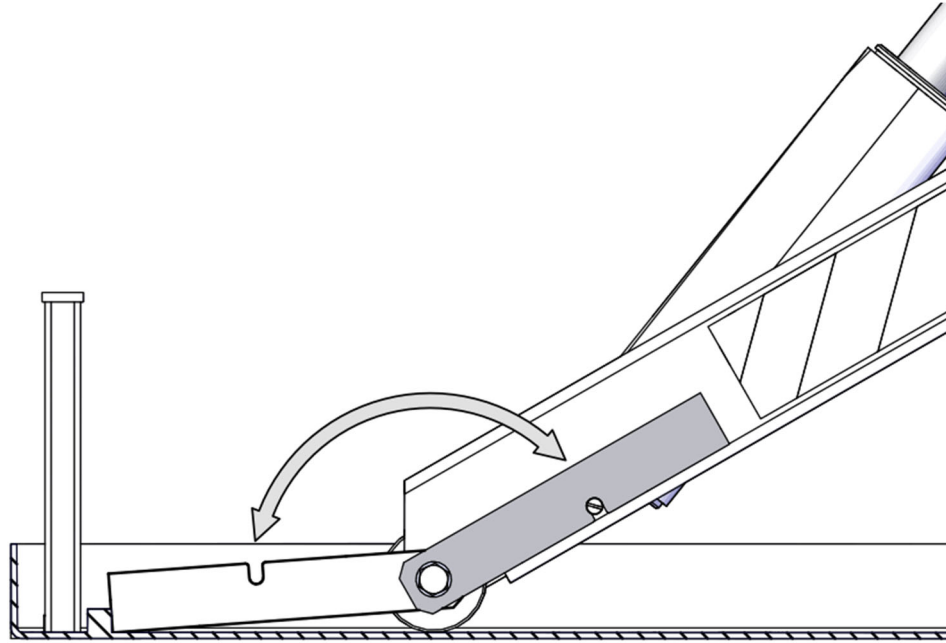


Figure 6: Position of the inspection supports, on both sides

6.4.1 Inserting the inspection supports

Move the unloaded lifting platform to the highest position.

Place the supports in position by folding them down (Figure 7).

Lower the lifting platform until the inspection supports are at the stop (Figure 8).

Ensure that the inspection supports are correctly positioned!

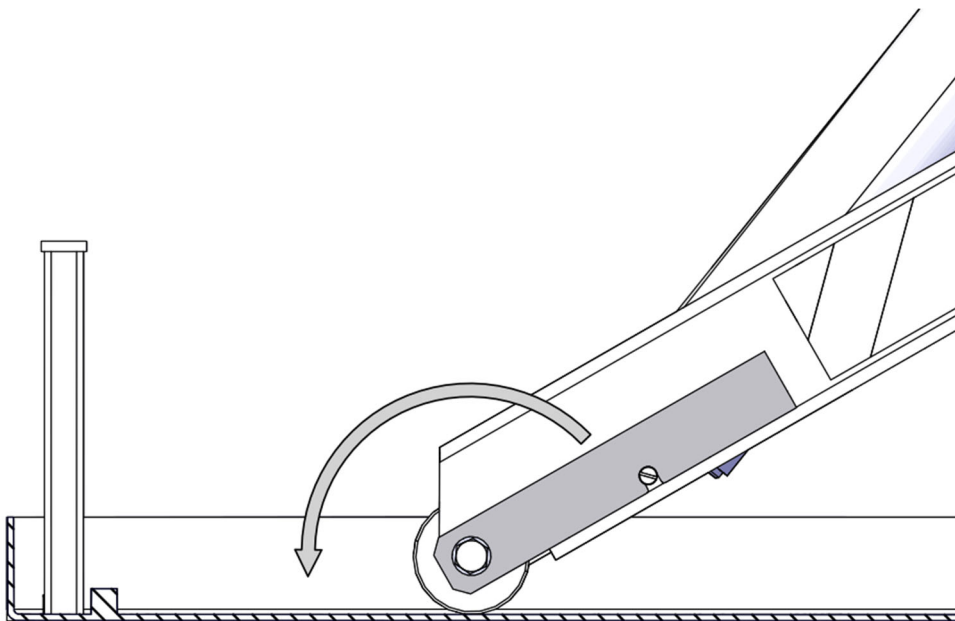


Figure 7: Folding down the inspection supports

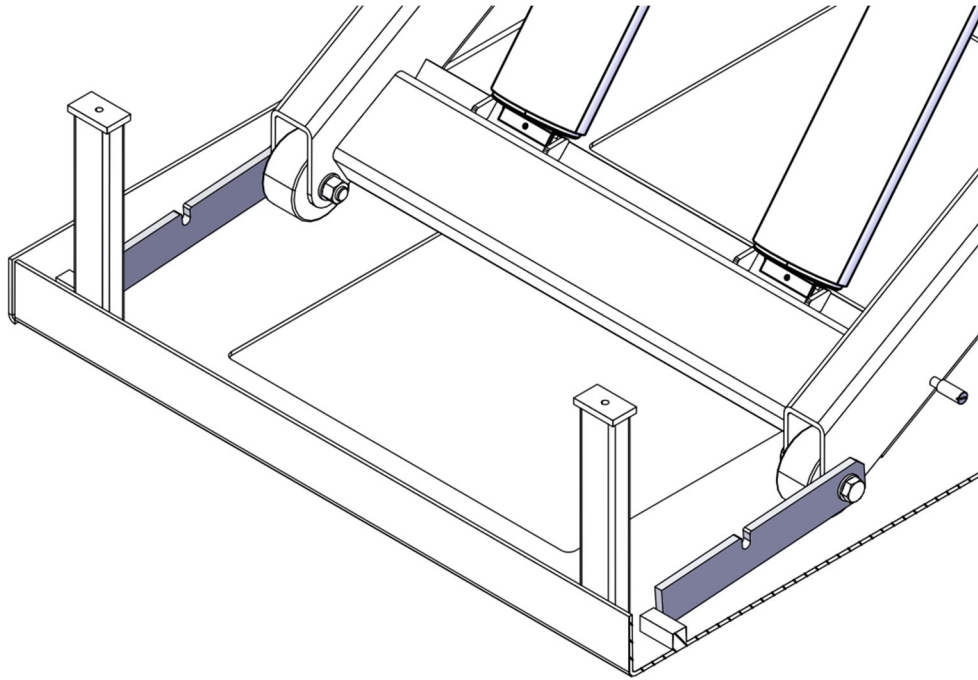


Figure 8: Inspection supports at the stop

6.4.2 Removing the inspection supports

Raise the lifting platform so that the supports are no longer at the stop.

Then rotate the supports back into their original position in the mounts (Figure 9).

Nobody should be under the raised lifting platform during this work.

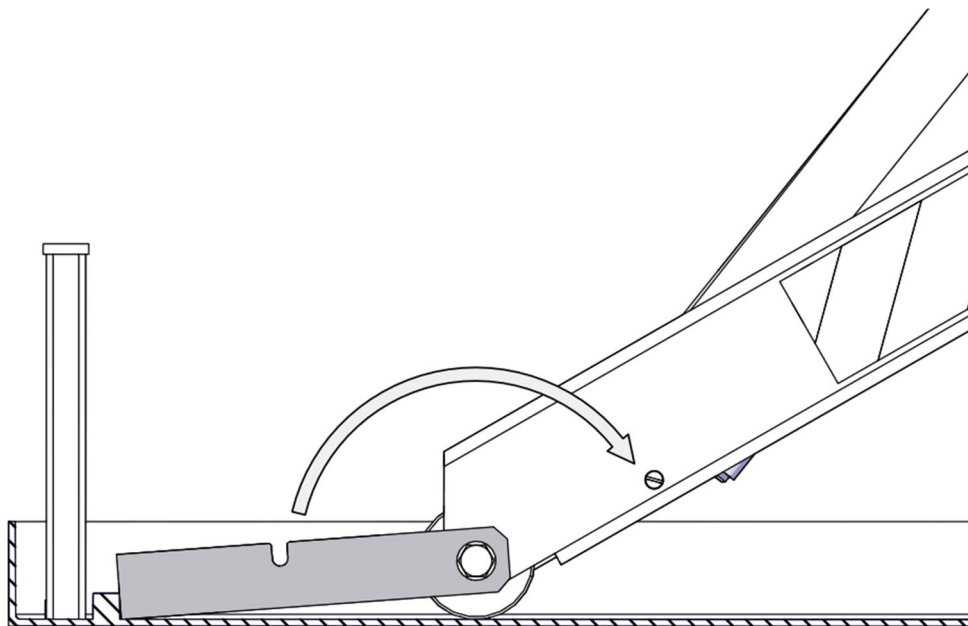


Figure 9: Folding down the inspection supports

6.5 Troubleshooting

Problems	Cause	Remedy
Table cannot be raised while the motor is working normally	The ring bolt(s) has not been removed.	Remove the ring bolt
	Fault in the AC voltage phases	Correct the AC voltage phase
	Electromagnetic interference	Check the function of the electromagnetic valve and repair if necessary
	The lifting platform is overloaded	Reduce the load
Table cannot be raised while the motor is not working	Limit switch is damaged	Replace the limit switch
Lifting platform cannot be lowered	Limit switch or micro switch on the protective device is damaged	Replace the limit switch or micro switch
	Electromagnetic valve malfunction	Check the function of the electromagnetic valve and repair if necessary
	Protective device in action	Press the UP button lightly
	A fault in the electrical circuit board	Replace the electrical circuit board
The scissors go beyond the end position (if there is one) when the table is lowered	Internal leakage in the electromagnetic valve	Check the function of the electromagnetic valve and repair if necessary
The lifting platform does not reach the full lifting height	Oil level is too low	Top up the oil
	Limit switch is damaged	Check and repair the limit switch. If necessary, replace the limit switch

6.6 Safety

Maintenance and repair work may only be performed if there are no components on the table.



WARNING

Unsuitable replacement parts may result in injuries to people and damage to the lifting platform.

- Use only original replacement parts from the manufacturer.
- If you require replacement parts, contact the service address.

After servicing work:

- All covers and attachments removed during servicing work must be reattached before the product is put back into operation.
- On completion of work on the lifting cylinder, check that the hydraulic system is not leaking.
- Check that all components and all connections are tight.

Correct servicing of the lifting platform requires appropriately trained specialist personnel. All maintenance and servicing work may be performed only by trained and authorised specialist personnel qualified to carry out the tasks concerned.

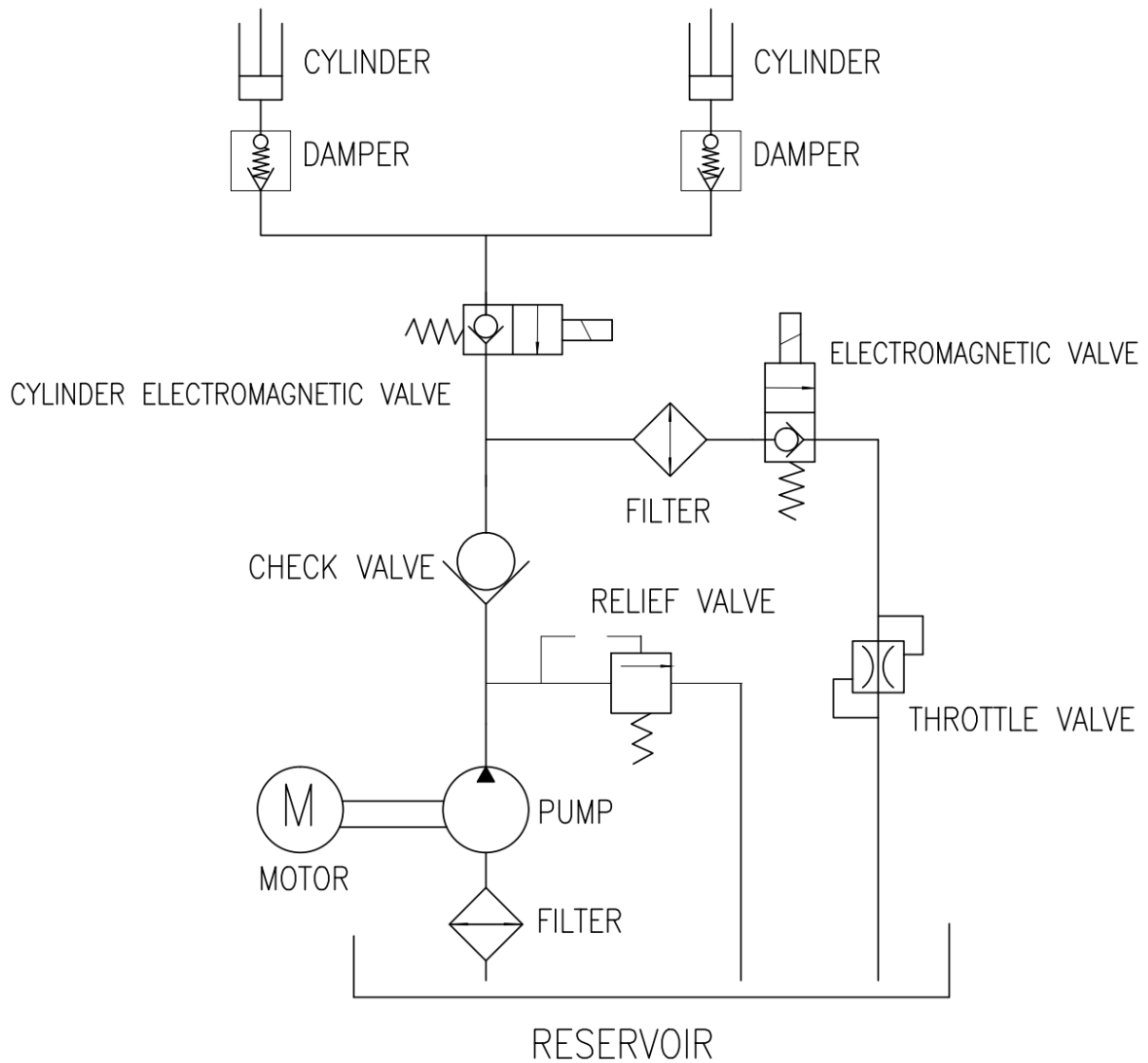
The owner is responsible for assigning specialist personnel and for providing the appropriate training.

Contact Bernd Siegmund GmbH in the case of defective components or modifications to the lifting platform.

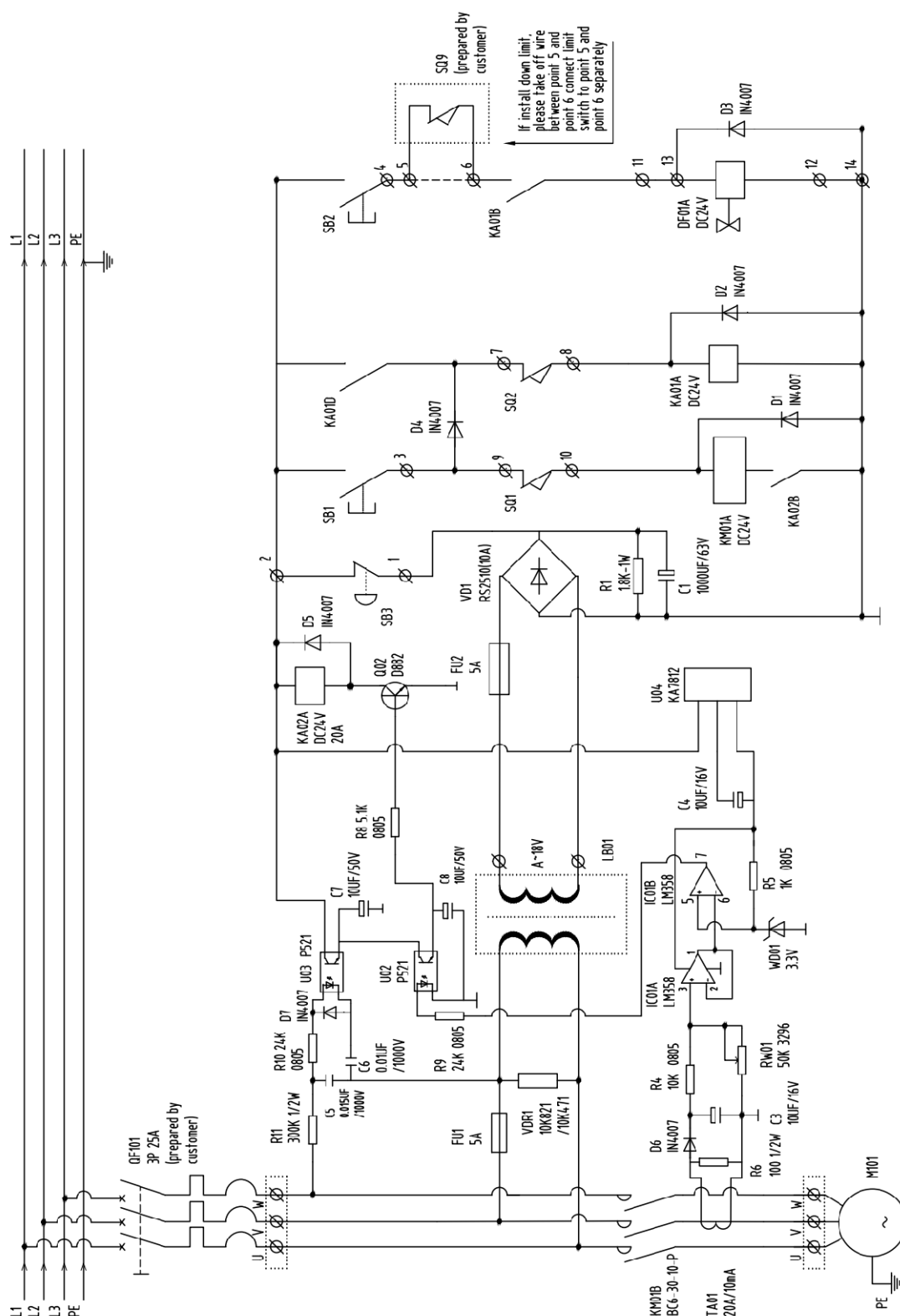
Maintenance staff and specialist personnel are responsible for ensuring that the work is performed safely and that the appropriate health and safety measures are taken. They must have read and understood the relevant regulations before starting work.

7 Hydraulic plan and circuit diagram

7.1 Hydraulic plan



7.2 Circuit diagram

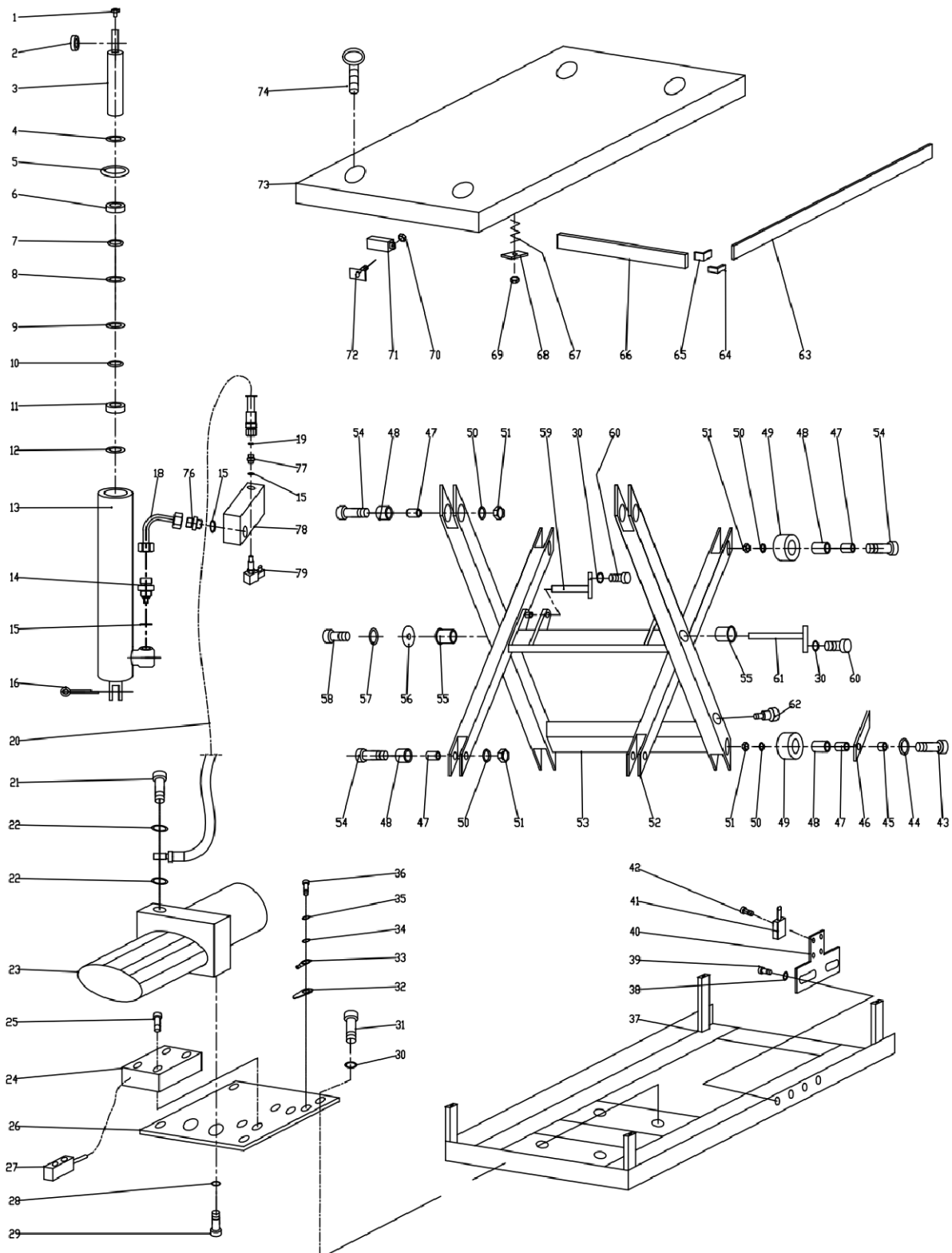


7.3 Parts list of the circuit diagram

No	Qty	Type	Name	Description
1	1	LB01	Control power transformer	DF30-110V-460V/0-24V 50VA
2	2	F1, F2	Fast melter	5A
3	1	VD1	Rectifier	RS-2510
4	1	VDR1	Voltage dependent resistor	10K/471, 10K/821
5	1	R1	Resistor	1.8K/1W
6	1	C1	Electrolytic condenser	1000uF/63V
7	1	KM01	AC contactor	BC-30-10
8	2	KA1; KA2	Middle relay	SRC-24VDC-SH
9	7	D1, D2, D3, D4, D5, D6, D7	Silicon rectifying diode	IN4007
10	1	DF01	Electromagnetic valve	DC24V
11	1	SB3	Emergency stop button	XB2-FS542C+ZB-BY9101
12	1	SB2	Down button	XB2-BA21C
13	1	SB1	Up button	XB2-BA21C
14	1	SQ1	Up limit switch	D4V-8108Z
15	2	SQ2	Safety switch	
16	1	SQ9	Down limit switch	D4V-8108Z (prepared by customer)
17	1	M101	Pump motor	
18	1	QF101	Circuit breaker	C45N3P 25A (prepared by customer)
19	1	R6	Resistor	100/0.5W
20	1	R4	Resistor	10K/0805
21	1	R5	Resistor	1K/0805
22	1	RW01	Rheostat	50K
23	1	WD01	Stabilovolt tube	3.3V
24	3	C3, C4, C7, C8	Electrolytic condenser	10uF/50V; 10uF/16V
25	1	IC01	Integrated curcuit	LM358
26	1	U04	Integrated curcuit	KA7812
27	2	U02, U03	Electric dipole	P521
28	1	TA01	Current transformer	20A
29	2	R9, R10	Resistor	24K/0805
30	1	R8	Resistor	5.1K/0805
31		R11	Resistor	300K/0.5W
32	2	C5, C6	Electrolytic condenser	0.015uF/1000V; 0.01uF/1000V
33	1	Q02	Audion	D882

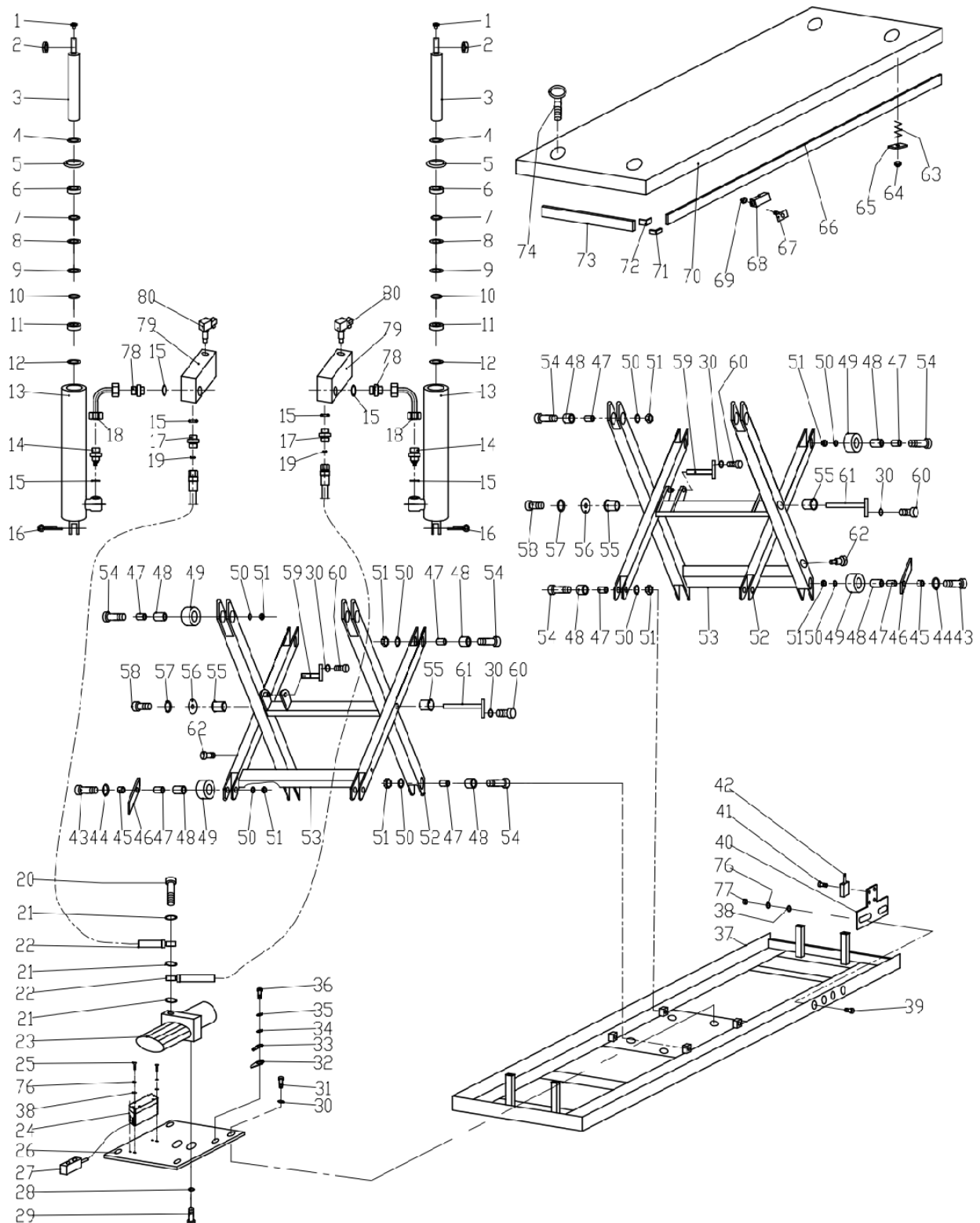
8 Replacement parts lists

8.1 Replacement parts list for HW4003, HW4004 and HW4010



No	Qty	Description	No	Qty	Description
1	2	Grease cup M6	41	1	Travel switch (ME-9101)
2	2	Bearing GE40ET	42	4	Screw M5x10
3	2	Piston rod	43	2	Bolt
4	2	Seal cover 58x50x6.5	44	2	Washer
5	2	Retaining ring $\varnothing 95$	45	2	Bushing
6	2	Cylinder cover	46	2	Prop
7	2	Guide ring	47	8	Bushing
8	2	Snap ring $\varnothing 100$	48	16	Bushing $\varnothing 34 \times \varnothing 30 \times 20$
9	2	O-ring 95x2.65	49	4	Roller
10	2	Snap ring $\varnothing 50$	50	8	Spring washer 18
11	2	Piston	51	8	Nut M18
12	2	Seal ring 100x75x22.3	52	1	Internal scissors
13	2	Cylinder	53	1	External scissors
14	2	Hose break valve	54	6	Bolt
15	2	Seal ring 16	55	2	Bushing $\varnothing 60 \times \varnothing 55 \times 60$
16	2	Split pin 5x35	56	1	Washer
17	1	Joint	57	1	Spring washer 12
18	2	Steel tube	58	1	Screw M12x30
19	1	O-ring 6x1.8	59	2	Pin
20	1	High pressure hose	60	3	Screw M8x20
21	1	Joint	61	1	Pin
22	2	Seal ring 14	62	2	Bolt
23	1	Hydraulic power pack	63	2	Safety frame I
24	1	Electric box	64	4	Fixed-board
25	4	Screw M5x10	65	4	Connected-board
26	1	Pump pack base	66	2	Safety frame II
27	1	Control switch	67	6	Spring
28	2	Spring washer 10	68	6	Buffer-board
29	2	Screw M10x20	69	6	Nut M8
30	7	Spring washer 8	70	4	Nut M4
31	4	Screw M8x12	71	2	Safety switch
32	1	Indicator $\varnothing 6$	72	4	Fixed-board
33	1	Connector lug $\varnothing 6-4$	73	1	Table
34	1	Washer 6	74	4	Lifting bolt M16
35	1	Spring washer 6	75	1	Lifting bolt M16
36	1	Screw M6x12	76	2	Joint
37	1	Chassis	77	1	Joint
38	2	Washer 6	78	1	Solenoid valve seat
39	2	Screw M6x10	79	1	Solenoid valve
40	1	Frame of travel switch			

8.2 Replacement parts list for HW6014D



No	Qty	Description	No	Qty	Description
1	4	Grease cup M6	41	4	Bolt M5x10
2	4	Bearing GE40ET	42	1	Travel switch
3	4	Piston rod	43	4	Bolt
4	4	Seal cover 58x50x6.5	44	4	Washer
5	4	Retaining ring $\varnothing 95$	45	4	Bushing
6	4	Cylinder cover	46	4	Prop
7	4	Guide ring	47	16	Bushing
8	4	Snap ring $\varnothing 100$	48	32	Bushing $\varnothing 34 \times \varnothing 30 \times 20$
9	4	O-ring 95x2.65	49	8	Roller
10	4	Snap ring $\varnothing 50$	50	16	Spring washer 18
11	4	Piston	51	16	Nut M18
12	4	Seal ring 100x75x22.3	52	2	Internal scissors
13	4	Cylinder	53	2	External scissors
14	4	Hose break valve	54	12	Bolt
15	10	Seal ring 16	55	4	Bushing $\varnothing 60 \times \varnothing 55 \times 60$
16	4	Split pin 4x35	56	2	Washer
17	2	Joint	57	2	Spring washer 12
18	4	Steel tube	58	2	Screw M12x30
19	2	O-ring 6x1.8	59	4	Pin
20	1	Joint	60	6	Screw M8x20
21	3	Seal ring 14	61	2	Pin
22	2	High pressure hose	62	4	Bolt
23	1	Hydraulic power pack	63	6	Spring
24	1	Electric box	64	6	Nut M8
25	4	Screw M5x10	65	6	Buffer-board
26	1	Pump pack base	66	2	Safety frame I
27	1	Control switch	67	8	Fixed-board
28	2	Spring washer 10	68	4	Safety switch
29	2	Screw M10x20	69	8	Nut M4
30	10	Spring washer 8	70	1	Table
31	4	Screw M8x12	71	4	Fixed-board
32	1	Indicator $\varnothing 6$	72	4	Connected-board
33	1	Connector lug $\varnothing 6-4$	73	2	Safety frame II
34	1	Washer 6	74	4	Lifting bolt M16
35	1	Spring washer 6	75	1	Lifting bolt M16
36	1	Screw M6x12	76	6	Spring washer 5
37	1	Chassis	77	1	Nut M5
38	6	Washer 5	78	4	Joint
39	2	Screw M5x20	79	2	Solenoid valve seat
40	1	Frame of travel switch	80	2	Solenoid valve

9 Decommissioning

Temporary decommissioning



WARNING

- Unauthorised use of the lifting platform may pose a risk to people.

Ensure suitable ambient conditions for storage; see section "2.8 Technical data".

Final decommissioning / disposal

Disassembly may be performed only by specialist personnel.



WARNING

- Lower the lifting platform to its lowest position.
- Disconnect the lifting platform from the mains power supply.
- Beware of stored residual energy. Release any residual pressure by slowly loosening connections.



NOTE

Any residual media, especially hazardous and environmentally harmful substances (hydraulic fluid), must be collected in suitable containers and disposed of properly.

Detailed information is available from the competent administrative authority.



NOTE

Final decommissioning and disposal require complete scrapping.

The product is dismantled into its component parts.

The parts must be recycled, disposed of in accordance with local regulations or returned to the manufacturer.

10 Declaration of conformity



Intrammat Group
Gildenweg 2, 7641 AZ Wierden
Tel: +31 (0) 850 409 800
info@intramatgroup.nl / www.intrammatgroup.nl
Bank: NL55RABO0307986772 – BIC: RABONL2U
KVK: 64759474 – BTW nr: NL855823136801

EG DECLARATION OF CONFORMITY

We herewith declare Importer/Producer Intramat Group :

That the following machine complies with the applicable fundamental health and safety requirements of the EC Directive based on the design and type, as put into circulation by us.

Subject:

Product description: Scissor lift

Product type: HW4003 / HW4004 / HW4010

Capacity: 4000 kg

Product description: Scissor lift

Product type: HW6014D

Capacity: 6000 kg

I, the undersigned, hereby declare that the industrial lift table specified above complies with Directive 2006/42/EC (Machinery Directive) and 2014/30/EU (Electromagnetic Compatibility, EMC) and 2014/35/EU (Low Voltage Directive, LVD). The undersigned is individually authorized to compile technical documentation declaring that the following standards, including their normative procedures, have been applied; NEN-EN1570-1:2011+A1:2014, NEN-EN 60204-1:2006+A1:2009

22-06-2023

Signature/Date

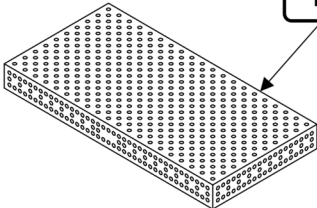
A handwritten signature in blue ink, appearing to read "Bert de Vries".

Management Intramat Group: Bert de Vries

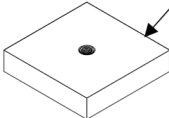
Intrammat Group

11 Installation instructions

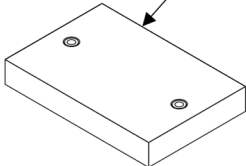
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T1	Schweißtisch / welding table	A. SYSTEM 16:	160020 - 2000x1000	1	
			160035 - 2000x1200		
			160030 - 2400x1200		
			160040 - 3000x1500		
		B. SYSTEM 22:	220020 - 2000x1000		
			220035 - 2000x1200		
			220030 - 2400x1200		
			220040 - 3000x1500		
		C. SYSTEM 28:	280020 - 2000x1000		
			280035 - 2000x1200		
			280030 - 2400x1200		
			280040 - 3000x1500		
T2	Isolationsplatte / isolation plate 135x135x30			4	00005108
T2.1	Isolationsplatte / isolation plate 200x135x30		Für / for 2400x1200 3000x1500	2	00005109
T3	Elektrohydraulischer Hubtisch / Electro-hydraulic lifting table		HW4003 - 2000x1000	1	00005045
			HW4004 - 2000x1200		00005046
			HW4010 - 2400x1200		00005047
			HW6014D - 3000x1500		00005048



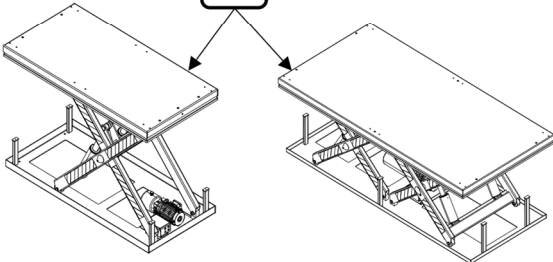
T1



T2



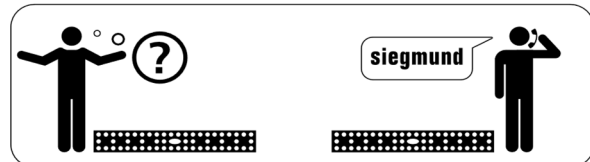
T2.1



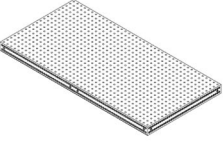
T3

ART. NR.	Overview	NAME	QTY	ERP
N1		A. SYSTEM 16: ISO 4017 – M14x30	4	00004062
		B. SYSTEM 22: ISO 4017 – M14x35	4	00004063
		C. SYSTEM 28: ISO 4017 – M14x40	4	00004064
N2		ISO 4762 – M10x25	8 / 12 *	00002821
N3		ISO 7089 – D14	4	000040461
N4		ISO 7089 – D10	8 / 12 *	00002953

* 8 – 2000x1000; 2000x1200
 12 – 2400x1200; 3000x1500

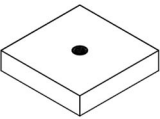


T1



1x

T2



4x

N1



4x

N3

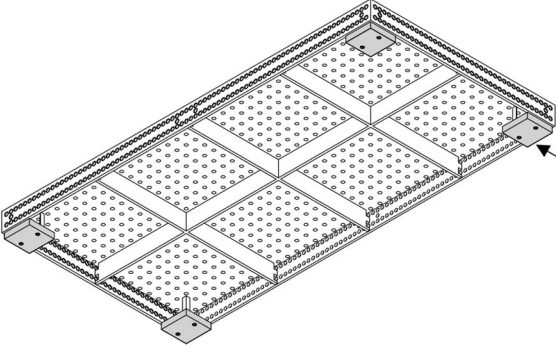


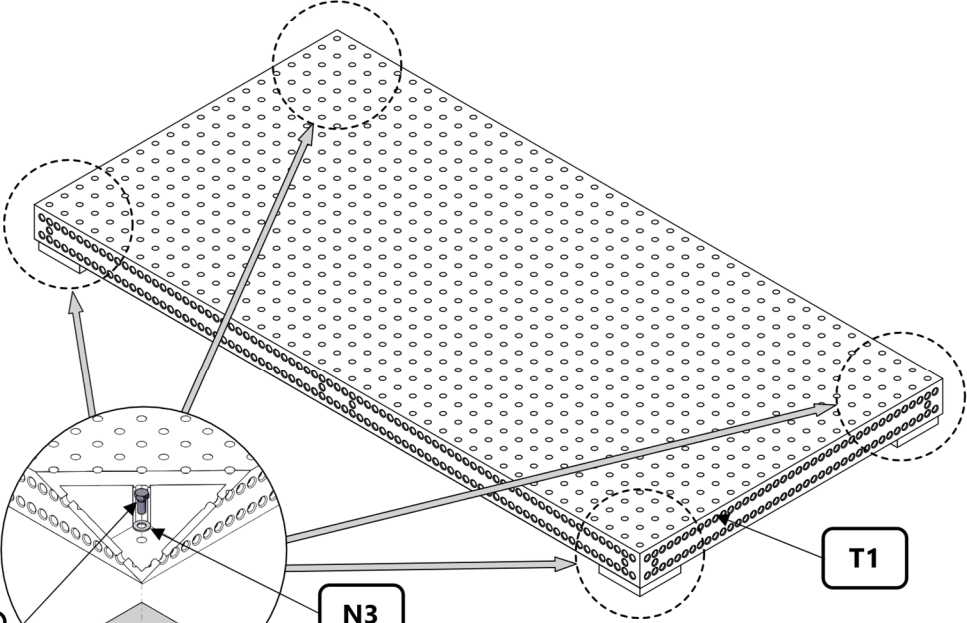
4x





T2





N1

T2

N3

T1



N1

SYSTEM 16	A	ISO 4017 – M14x30
SYSTEM 22	B	ISO 4017 – M14x35
SYSTEM 28	C	ISO 4017 – M14x40

